

Amendments to the Claims

1. (Currently Amended) A washing machine for washing laundry ~~items using washing water~~ without addition of a detergent by the user comprising:

a housing;

a washing tub for containing ~~the items to be washed~~ laundry;

an outer tub for containing the washing tub;

a water supply device for supplying water into the washing tub;

an electrolyzed water-generating device connected with the water supply device for providing electrolyzed water; and

a modifying agent feeding device for providing a modifying agent into the washing tub, wherein the modifying agent feeding device is connected with the water supply device, wherein the electrolyzed water-generating device provides electrolyzed water with a pH of at least 8.5, wherein the washing machine maintains the washing water pH in the range from 8.5 to 11, wherein the washing water electric conductivity is from 261 μ S/cm to 875 μ S/cm, and wherein the washing water has a surface tension from 25 to 40mN/m during washing operation, the modifying agent is a mixture of one or more detergent,

wherein the water supply device comprises:

a water supply tube for connection with a tap water source;

a water supply valve;

a water supply port provided on the upper part of washing tub;

a first water supply path connecting the water supply valve and the water supply port; and

a second tap water supply tube connected to the output end of water supply valve,

wherein the electrolytic generating device and the modifying agent feeding device are positioned

at the output end of the second tap water supply tube, and wherein the electrolytic water generating device comprises:

an electrolyzing cell having a plurality of diaphragms, a water inlet, a cathode chamber and an anode chamber;

a power supply converting device for converting alternating current into direct current (DC) to provide DC current to the electrolyzing cell; wherein the water inlet of the electrolyzing cell is connected to the second tap water supply tube of the output end of the water supply valve, wherein the cathode chamber and the anode chamber of the electrolyzing cell are connected to a first drainpipe for providing electrolytic solution to the washing tub, and a second drainpipe connected to a water drainage tube, respectively, and

wherein the modifying agent feeding device comprises:

a liquid storage container having a bottom;

a dosing and feeding device having an input end and a plurality of output ends, set at a lower part of the liquid storage container for providing modifying agent at a certain quantity, wherein the input end of the dosing and feeding device is connected with a liquid outlet tube at the bottom of the liquid storage container, wherein the dosing and feeding device is a volumetric measuring valve comprising:

a buffer chamber with a rating volume being arranged at on the center of the volumetric measuring valve,

a modifying agent valve located at the liquid outlet tube at a bottom of the liquid storage container for introducing a modifying agent into the buffer chamber,

a water inlet valve and a water outlet valve set in the opposite of the buffer chamber,

an emptying valve at the bottom of the buffer chamber,

wherein the water inlet valve is connected to the first drainpipe which is connected with the cathode chamber of the electrolytic generating device for providing alkaline ionized water electrolytic solution into the buffer chamber, the water outlet valve is connected to the first drainpipe and discharging the mixture of electrolytic solution and modifying agent from the buffer chamber into the washing tube; and the water inlet valve and water outlet valve alternatively control the water flow into and out the buffer chamber by their turn-on and turn-off[.], and

the electrolyzing cell of the electrolyzed water generating device, and the liquid storage container of the modifying agent feeding device are externally hung and mounted on the housing.

2. (Cancelled)

3. (Cancelled)

4. (Currently Amended) A washing machine for washing laundry without addition of a detergent by the user comprising:

a housing;

a washing tub for containing laundry;

an electrolyzed water generating device having an electrolyzing cell with a cathode chamber and an anode chamber for providing electrolyzed water; the cathode chamber is connected to a first drainpipe for providing alkaline ionized water to the washing tub; and,

a modifying agent feeding device having a liquid storage container; for providing a modifying agent into the washing tub, wherein the electrolyzing cell of the electrolyzed water generating device, and/or the liquid storage container of the modifying agent feeding device is

externally hung and mounted on the housing, the modifying agent is a mixture of one or more detergent, wherein the modifying agent feeding device comprises:

a liquid storage container having a bottom;

a dosing and feeding device having an input end and a plurality of output ends, set at a lower part of the liquid storage container for providing modifying agent at a certain quantity, wherein a input end of the dosing and feeding device is connected with a liquid outlet tube at the bottom of the liquid storage container, wherein one output end of the dosing and feeding device is linked to a first drainpipe which connected to a cathode chamber of the electrolyzing cell, and the other output end is connected with a water drainage tube and a second drainpipe through an emptying pipe, wherein the dosing and feeding device is a volumetric measuring valve comprising:

a buffer chamber with a rating volume being arranged on~~at~~ the center of the volumetric measuring valve,

a modifying agent valve located at the liquid outlet tube at the bottom of the liquid storage container for introducing a modifying agent into the buffer chamber,

a water inlet valve and a water outlet valve set in the opposite of the buffer chamber, an emptying valve at the bottom of the buffer chamber,

wherein the water inlet valve is connected to the first drainpipe which is connected with the cathode chamber of the electrolytic generating device, and the water inlet valve and water outlet valve alternatively control the water flow into and out the buffer chamber by their turn-on and turn-off; ~~for providing electrolytic solution into the buffer chamber,~~ the water outlet valve is connected to the first drainpipe and discharging the mixture of alkaline water and modifying agent from the buffer chamber into the washing tub; ~~the water outlet valve is connected to the~~

~~first drainpipe and discharging the mixture of electrolytic solution and modifying agent from the buffer chamber into the washing tube and~~

the amount of the modifying agent is added within 0.2 to 3.0g each washing time.

5. (Currently Amended) The washing machine of claim 4, wherein the electrolyzing cell and/or the liquid storage container are/is is externally hung and mounted upon the lateral surface of a housing back of the washing machine.

6. (Currently Amended) The washing machine of claim 4, wherein a first perforation is provided at an upper part of a rear panel of the housing, for allowing a tape water supply tube to pass through the first perforation and connected with electrolyzing cell ~~water to pass through the first perforation,~~ and wherein a second perforation is provided at a lower part of the rear panel of the housing for allowing passing the first drainpipe which is connected with a water inlet pipe of the washing tub for discharging the mixture of electrolytic solution and modifying agent into the washing tuba second drainpipe to pass through the second perforation for ~~connecting to a water drainage tube.~~

7. (Cancelled)

8. (Original) The washing machine of claim 1, wherein the electrolyzing cell and/or the liquid storage container is covered with a covering board.

9. (Currently Amended) A method of washing ~~items~~ laundry in a washing machine without addition of a detergent by the user, comprising the steps of :

electrolyzing tap water and simultaneously adding a dosage of modifying agent, the washing water being the mixture solution of ~~electrolyzed water~~ alkaline ionized water and the modifying agent, wherein the pH of the washing water is maintained in the range from 8.5 to 11,

wherein the electric conductivity of the washing water is from $261\mu\text{S}/\text{cm}$ to $875\mu\text{S}/\text{cm}$, the modifying agent is a mixture of one or more detergent, wherein steps of said method comprises: supplying tap water to the electrolyzing cell for electrolyzing of the tap water to generate an acidic ionized water and an alkaline ionized water respectively;

supplying the alkaline water into a washing tube and storing the acidic ionized water for sterilizing the items; wherein

the alkaline ionized water is activated by the modifying agent fed by the modifying agent supply device mounted on a housing of washing machine;

starting a normal washing; and,

performing a rinsing operation after water is supplied into the washing tub again, or a proper amount of acidic ionized water is introduced for rinsing the items; and supplying tap water to meet a predetermined water level, wherein the modifying agent is fed by a modifying agent feeding device which comprises:

a liquid storage container having a bottom;

a dosing and feeding device having an input end and a plurality of output ends, set at a lower part of the liquid storage container for providing modifying agent at a certain quantity, wherein an input end of the dosing and feeding device is connected with a liquid outlet tube at a bottom of the liquid storage container, wherein the dosing and feeding device is a volumetric measuring valve comprising:

a buffer chamber with a rating volume being arranged on~~at~~ the center of volumetric measuring valve,

a modifying agent valve located at the liquid outlet tube at the bottom of the liquid storage container for introducing modifying agent into the buffer chamber,

a water inlet valve and a water outlet valve set in the opposite of the buffer chamber,
an emptying valve at the bottom of the buffer chamber,

wherein the water inlet valve and the water outlet valve is connected respectively to the first drainpipe which connected to a cathode chamber of the electrolyzing cell for providing electrolytic solution into the buffer chamber, the water outlet valve is connected to the first drainpipe and discharging the mixture of electrolytic solution and modifying agent from the buffer chamber into the washing tube, and the water inlet valve and water outlet valve alternatively control the water feeding into the buffer chamber and discharging the mixture of electrolytic solution and modifying agent from the buffer chamber into the washing tube by their turn-on and turn-off.

10. (Original) The method of claim 9 further comprising the step of maintaining the washing water pH in the range from 9 to 11.

11. (Cancelled)

12. (New) The washing machine of claim 1, wherein the hardness of washing liquid is in range from 5 to 400ppm and the amount of the modifying agent is added within 0.2 to 3.0g each washing time.

13. (New) The washing machine of claim 1, wherein the electrolyzing cell and the liquid storage container of the modifying agent feeding device are externally hung and mounted upon the lateral surface of the housing back of the washing machine.

14. (New) The washing machine of claim 1, wherein a first perforation is provided at an upper part of a rear panel of the housing, for allowing a tape water supply tube to pass through the first perforation and connected with electrolyzing cell, and wherein a second perforation is provided at a lower part of the rear panel of the housing for passing the first drainpipe which is

connected with a water inlet pipe of washing tub for discharging the mixture of electrolytic solution and modifying agent into the washing tub.

15. (New) The washing machine of claim 1, wherein the electrolyzing cell and/or the liquid storage container is covered with a covering board.